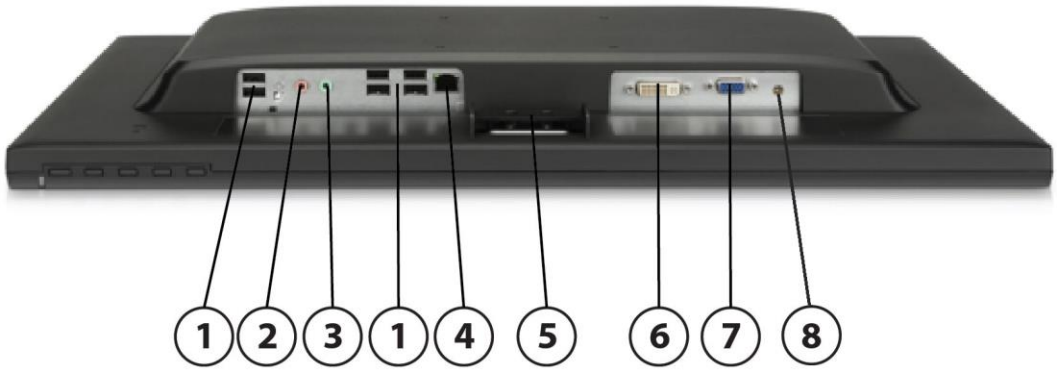
Overview

HP t310 AiO Zero Client

FRONT

1. Auto (Reset display to factory defaults)/Exit On Screen Display
2. Menu (On Screen Display)/ Select On Screen Display Items
3. Increase volume/ Navigate On Screen Display
4. Decrease volume/ Navigate On Screen Display
5. Power on/off button
6. Power indication LED
7. HP Wired USB Keyboard
8. HP Wired USB Mouse

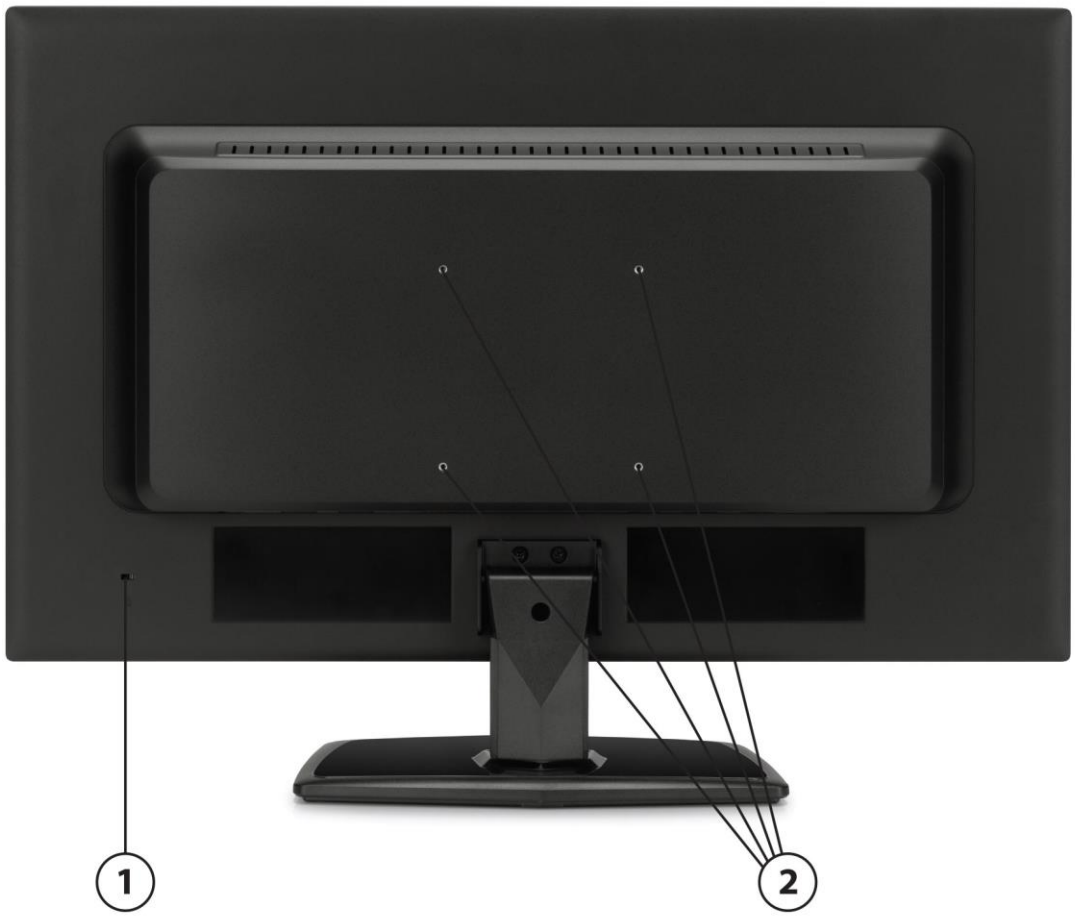
Overview



BOTTOM

1. 6 USB 2.0 ports (1 used for Keyboard, 1 for Mouse)
2. Audio in (Pink– microphone)
3. Audio out (Green – headphones)
4. RJ45 LAN connection to host VMware for “virtual desktop”
5. Stand Connector
6. DVI-I OUT connector for 2nd monitor to “extend” desktop
7. VGA IN connector to attach to local host PC
8. AC Power

Overview



BACK

1. Security cable slot
2. 100mm VESA mounting holes

Overview

PRODUCT OVERVIEW

Maximize available workspace while saving time and money with the PCoIP-optimized HP t310 AiO Thin Client that connects users to your VMware networks in no time. Ready to go out of the box with an included keyboard and mouse, you can customize your all-in-one with an array of inputs that support external peripherals, a second display, Ethernet, and audiovisual interactivity. Keep all data in the data center with a thin client that transfers screens to the local user for an ultra-high level of security and easy client management.

Hardware features:

- TERA2321 PCoIP Zero Client processor
- 512 MB DDR3 1333 MHz RAM
- 32MBFlash memory to store firmware
- 10/100/1000 Gigabit Ethernet (RJ-45)
- 23.6" diagonal widescreen LED backlit display with support for 1 additional display via DVI-I with resolutions up to 1920 x 1080
- 6 USB 2.0 ports: 1 for keyboard, 1 for mouse, 4 for other USB devices
- Contains 0% post-consumer recycled plastics (by weight)

HP PCoIP Zero Client System Features:

- Uses the TERA2321 PCoIP Zero Client Processor to provide dedicated hardware decode of the PCoIP desktop
- Delivers a high performance end-user experience using the PCoIP protocol
- Fully interoperable with all PCoIP endpoints including PCoIP virtual desktops, PCoIP remote workstation hosts and APEX 2800 server offload cards
- Full power management with Wake-on-LAN support
- AES-128 bit or AES-256 bit encryption
- No application operating system and no persistent user data is stored on the zero client device
- Simple and quick to deploy and manage using the PCoIP Management Console (available from techsupport.teradici.com)

Warranty:
HP Total Care Warranty and Services: limited three-year hardware warranty in most regions. HP Care Pack Services extend service contracts beyond your standard warranties. For more details visit: http://www.hp.com/go/lookuptool.

Technical Specifications

OPERATING SYSTEM

Completely Operating System Independent

PROCESSOR

TERA2321 PCoIP Zero Client processor

MEMORY

Flash (boot drive) memory	32MB
System memory	512 MB DDR3 1333MHz SDRAM

DISPLAY

23.6" diagonal widescreen LED backlit display with support for 1 additional display via DVI-I with resolutions up to 1920 x 1080.

Horizontal Viewing Angle	170 degrees (Typ) / 150 degrees (Min) @ CR>10
Vertical Viewing Angle	160 degrees (Typ) / 140 degrees (Min) @ CR>10
Aspect Ratio	16:9
Pixel Pitch	0.2715 (H) x 0.2715 (V)
Brightness	300cd/m2
Response Time	Typical 5ms
Diagonal measure	23.6 inch (59.9 cm)

INPUT/OUTPUT (peripheral support)

Keyboard	HP Wired USB Keyboard (standard)
Mouse	HP Wired USB Mouse (standard)

AUDIO

Output	Two 1 W speakers, 1/8-inch (3.5 mm) headphone mini-jack
Input	1/8-inch (3.5 mm) microphone mini-jack

HARDWARE SECURITY

HP Cable Lock Slot

NETWORKING & COMMUNICATIONS

Hardware networking

10/100/1000 Gigabit Ethernet (RJ-45)
Wake on LAN (WOL) using magic packet
TCP/IP with DNS and DHCP
UDP

I/O PORTS & CONNECTORS

6 USB 2.0 (on the bottom)
1 NIC (RJ-45 or Fiber)
1 Microphone

Technical Specifications

1 Headphone
1 Power Connector
1 VGA Connector
1 DVI-I Connector

NOTE: 2 of 6 USB 2.0 ports used for keyboard and mouse.

PLATFORM

Host Support	VMware Horizon View, PCoIP remote workstations
Protocols	PCoIP
Management	PCoIP Management Console (available from techsupport.teradici.com) HP Device Manager

LANGUAGES

English, French, German, Italian, Spanish, Portuguese, Greek, Traditional Chinese, Simplified Chinese, Japanese, and Korean

DIMENSIONS (WxDxH)

With stand
21.92 x 6.45 x 15.73 in
55.68 x 16.38 x 39.95 cm

Without stand
21.92 x 2.22 x 13.37 in
55.68 x 5.65 x 33.97 cm

Technical Specifications

WEIGHT

With stand
8.78 lb (3.99 kg)

Without stand
8.07 lb (3.67 kg)

POWER

65 W AC adapter (12V DC)
Worldwide auto-sensing 100-240 VAC, 50-60 Hz

ENVIRONMENTAL

Operating temperature range	Standard 50° to 104° F (10° to 40° C)
Non-operating temperature range	-22° to 140° F (-30° to 60° C)
Humidity	Condensing 10% to 90% non-condensing

(max. rate of change is 20 °C per hour or 36 °F per hour)

NOTE: *Specifications are at sea level with altitude derating of 1°C/300 m (1.8 °F/1000 ft) to a maximum of 3Km (10,000 ft), with no direct, sustained sunlight. Upper limit may be limited by the type and number of options installed.

REGULATORY COMPLIANCE

Ergonomics	German ZH1/618; EN29241-3, approved
Safety	UL 60950-1; cUL No. 60950-1-07; IEC 60950-1; EN60950-1; EK1-ITB2000
Electro-Magnetic Compatibility	CE (EN 55022; EN55024; EN 61000-3-2; EN61000-3-3); FCC (CFR 47, Part 15); ICES-003; VCCI

COUNTRY OF ORIGIN

Taiwan for North American SKUs
China for ROW

Technical Specifications – Environmental Data

Environmental Data

Eco-Label Certifications & declarations

This product has received or is in the process of being certified to the following approvals and may be labeled with one or more of these marks:

- IT ECO declaration
- US ENERGY STAR®
- EPEAT <Silver> registered in the United States. See http://www.epeat.net for registration status in your country.

Energy Consumption (in accordance with US ENERGY STAR® test method)	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 60Hz**
Normal Operation (Short idle)	21.64 W	21.56 W	21.43 W
Normal Operation (Long idle)	7.81 W	7.86 W	7.78 W
Sleep	NA	NA	NA
Off	1.86 W	1.93 W	1.85 W

Heat Dissipation*	**115VAC, 60Hz**	**230VAC, 50Hz**	**100VAC, 60Hz**
Normal Operation (Short idle)	74 BTU/hr	74 BTU/hr	73 BTU/hr
Normal Operation (Long idle)	27 BTU/hr	27 BTU/hr	27 BTU/hr
Sleep	NA	NA	NA
Off	6 BTU/hr	7 BTU/hr	6 BTU/hr

***NOTE:** Heat dissipation is calculated based on the measured watts, assuming the service level is attained for one hour.

Additional Information

- This product is in compliance with the Restrictions of Hazardous Substances (RoHS) directive - 2011/65/EC.
- This HP product is designed to comply with the Waste Electrical and Electronic Equipment (WEEE) Directive – 2002/96/EC.
- This product is in compliance with California Proposition 65 (State of California; Safe Drinking Water and Toxic Enforcement Act of 1986).
- This product is in compliance with the IEEE 1680 (EPEAT) standard at the <Silver> level, see www.epeat.net
- Plastics parts weighing over 25 grams used in the product are marked per ISO11469 and ISO1043.
- This product contains 0% post-consumer recycled plastic (by wt.)
- This product is 99.3% recycle-able when properly disposed of at end of life.

Packaging Materials

External:	PAPER/Corrugated	1174 g
Internal:	PLASTIC/EPS (Expanded Polystyrene)	190 g
	PLASTIC/Polyethylene low density	41 g

The plastic packaging material contains at least 100% recycled content.

Technical Specifications – Environmental Data

The corrugated paper packaging materials contains at least 100% recycled content.

RoHS Compliance

Hewlett-Packard is committed to compliance with all applicable environmental laws and regulations, including the European Union Restriction of Hazardous Substances (RoHS) Directive. HP's goal is to exceed compliance obligations by meeting the requirements of the RoHS Directive on a worldwide basis. By July 1, 2006, RoHS substances will be virtually eliminated (virtually = to levels below legal limits) for all HP electronic products subject to the RoHS Directive, except where it is widely recognized that there is no technically feasible alternative (as indicated by an exemption under the EU RoHS Directive).

Material Usage

This product does not contain any of the following substances in excess of regulatory limits (refer to the HP General Specification for the Environment at http://www.hp.com/hpinfo/globalcitizenship/environment/supplychain/gen_specifications.html):

- Asbestos
- Certain Azo Colorants
- Certain Brominated Flame Retardants – may not be used as flame retardants in plastics
- Cadmium
- Chlorinated Hydrocarbons
- Chlorinated Paraffins
- Formaldehyde
- Halogenated Diphenyl Methanes
- Lead carbonates and sulfates
- Lead and Lead compounds
- Mercuric Oxide Batteries
- Nickel – finishes must not be used on the external surface designed to be frequently handled or carried by the user.
- Ozone Depleting Substances
- Polybrominated Biphenyls (PBBs)
- Polybrominated Biphenyl Ethers (PBBEs)
- Polybrominated Biphenyl Oxides (PBBOs)
- Polychlorinated Biphenyl (PCB)
- Polychlorinated Terphenyls (PCT)
- Polyvinyl Chloride (PVC) – except for wires and cables, and certain retail packaging has been voluntarily removed from most applications.
- Radioactive Substances
- Tributyl Tin (TBT), Triphenyl Tin (TPT), Tributyl Tin Oxide (TBTO)

Packaging Usage

HP follows these guidelines to decrease the environmental impact of product packaging:

- Eliminate the use of heavy metals such as lead, chromium, mercury and cadmium in packaging materials.
- Eliminate the use of ozone-depleting substances (ODS) in packaging materials.
- Design packaging materials for ease of disassembly.
- Maximize the use of post-consumer recycled content materials in packaging materials.
- Use readily recyclable packaging materials such as paper and corrugated materials.
- Reduce size and weight of packages to improve transportation fuel efficiency.

- Plastic packaging materials are marked according to ISO 11469 and DIN 6120 standards.

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return and recycling programs in many geographic areas. To recycle your product, please go to: http://www.hp.com/go/reuse-recycle or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/recyclers. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

Hewlett-Packard Corporate Environmental Information

For more information about HP's commitment to the environment:

Global Citizenship Report
http://www.hp.com/hpinfo/globalcitizenship/gcreport/index.html

Eco-label certifications
http://www.hp.com/hpinfo/globalcitizenship/environment/productdesign/ecolabels.html

ISO 14001 certificates:
http://www.hp.com/hpinfo/globalcitizenship/environment/operations/envmanagement.html

After-market Options (Availability may vary per region)

		Part Number
Display	HP ProDisplay P231 23-inch LED Backlit Monitor	E4S07AA
Security	HP UltraSlim Cable Lock	H4D73AA
	HP Quick Release [1]	EM870AA
Mounting	HP Integrated Work Center[1]	E8H16AA
	HP Integrated Work Center[1]	G1V61AA

NOTE 1: Screws shorter than 14mm required when using the HP Quick Release or HP Integrated Work Center with the t310 AIO.

Summary of Changes

Date of change:	Version History:		Description of change:
May 06, 2014	v1 April to v2 June 5	**Added**	Add document ID to footnotes section, After market options part#
June 28, 2014	V2 June 5 to v3 June 28, 2014	**Changed**	Dimensions, Weight and Temperature Range
July 15, 2014	v3 to v4	**Changed**	Operating Temperature
August 1, 2014	From v5 to v6	**Added**	Options and accessories notes
August 25, 2014	From v6 to v7	**Changed**	Display, Dimensions and Environmental sections updated
Sept 9, 2014	From v7 to v8	**Added**	Environmental data

Summary of Changes

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